

Applic. No.: 09/655,091
Amdt. Dated August 26, 2006
Reply to Office action of May 26, 2006

REMARKS/ARGUMENTS

Reconsideration of the application is requested.

Claims 1-4 and 7-10 remain in the application. Claims 1-2 have been amended. Claims 5-6 and 11-14 have been previously cancelled. Claims 9-10 have been withdrawn. Rejoinder of claims 9-10 is requested upon allowance of claims 1-2 because claims 9-10 are dependent on claims 1-2, respectively.

In item 3 on page 2 of the above-identified Office action, claims 2, 4, and 8 have been rejected as being indefinite under 35 U.S.C. § 112, second paragraph.

More specifically, the Examiner has stated that it is not clear from the language of claim 2 how and in what manner a condenser is able to define a region around itself, or what such a defined region encompasses.

The language of claim 2 has been modified to make it clear that there is a region around the condenser, not necessarily defined by the condenser. This recitation is only for the purpose of providing antecedent basis for the limitation "said drain pipe fluidically connecting said region around said condenser to said condensing chamber." If this recitation is

Applic. No.: 09/655,091
Amdt. Dated August 26, 2006
Reply to Office action of May 26, 2006

not satisfactory, Applicant would appreciate any suggestion by the Examiner.

It is accordingly believed that the claims meet the requirements of 35 U.S.C. § 112, second paragraph. Should the Examiner find any further objectionable items, counsel would appreciate a telephone call during which the matter may be resolved. The above-noted changes to the claims are provided solely for cosmetic and/or clarificatory reasons. The changes are neither provided for overcoming the prior art nor do they narrow the scope of the claims for any reason related to the statutory requirements for a patent.

In item 5 on pages 3-4 of the above-mentioned Office action, claims 1-4 and 7-8 have been rejected as being unpatentable over Glantz et al. (US 5,596,613) under 35 U.S.C. § 103(a).

As will be explained below, it is believed that the claims were patentable over the cited art in their original form and the claims have, therefore, not been amended to overcome the references. However, the language of the claim 1 has been slightly modified to make it clear that the condenser is located in the inside of the containment, as can be clearly seen in the figure.

Applic. No.: 09/655,091
Amdt. Dated August 26, 2006
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Before discussing the prior art in detail, it is believed that a brief review of the invention as claimed, would be helpful.

Claim 1 calls for, inter alia:

a condenser disposed in said interior space;

a drain pipe for noncondensable gases, said drain pipe disposed in said interior space and fluidically connecting said top region of said pressure chamber to said condensing chamber, said drain pipe defining a direct connection to said condensing chamber, and said drain pipe not connected to said condenser, said drain pipe having an upper end disposed at a level above said condenser and a bottom end immersed into said cooling liquid.

Claim 2 calls for, inter alia:

a condenser disposed in said pressure chamber;

a region around said condenser;

. . .

a drain pipe for noncondensable gases, said drain pipe fluidically connecting said region around said condenser to said condensing chamber, and said drain pipe having a top end disposed above said condenser, and said drain pipe defining a direct connection to said condensing chamber, and said drain pipe not connected to said condenser, said drain pipe having an upper end disposed at a level above said condenser and a bottom end immersed into said cooling liquid.

First, it is noted that the basic structure of the overall condenser system according to Gluntz et al. is very different from the concept of the invention of the instant application. It is especially noted that the condenser system according to Gluntz et al. has a condenser located outside of the actual

Applic. No.: 09/655,091
Amdt. Dated August 26, 2006
Reply to Office action of May 26, 2006

containment, whereas in the invention of the instant application the condenser is positioned inside of the containment vessel. This fundamental difference in the location of the condenser entails serious consequence, which inevitably results in fundamentally different stream and pipeline arrangement in the connection of the two condenser types, so that the transfer between the individual technological knowledge is impossible.

In Gluntz et al., the condenser 54 is clearly located in the water reservoir above the actual containment. During operation, the atmospheric gas in the interior of the containment is passed over through the feed line 60 into the condenser 54, whereby a cooling through heat exchange with the surrounding water bath occurs. The noncondensable gases are left as a result of a condensation of the water part of the atmospheric gas. It is further described in Gluntz et al. that the accrued condensate is carried off into the condensate basin 22 through the condensate drainpipe 66. The noncondensable gases are, in contrast, targetedly led away through the pipe 68. As a result, this means that due to the structure of the condenser system of Gluntz et al., pipelines formed as part of the condenser 54 are provided for communicating with the atmospheric gas, which necessarily take into account of the existence of noncondensable gas part. In

Appl. No.: 09/655,091
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consideration of the dimensioning and capacity planning, the condenser 54 is thus configured for handling this kind of gas mixture, whereby subsequently a targeted further processing of the condensate on one hand and the noncondensable gases on the other hand is provided. An interference of the operation of the condenser 54 by the noncondensable gases cannot at all occur in Gluntz et al. because this kind of gas part has already been considered in the design from the very beginning.

In contrast, in the invention of the instant application, the building condenser is located inside of the actual containment. In a design that is opposite compared to the concept of Gluntz et al., the heat exchanger of the building condenser is connected with the cooling medium in reservoir outside of the containment, whereby the cooling medium is guided in the corresponding pipes. The medium to be cooled and to be condensed, namely the containment atmosphere, is, in contrast to the concept of Gluntz et al., not guided in pipes, rather circumflows the building condenser inside the containment freely. Therefore, in contrast to the concept of Gluntz et al. according to which no interference of the condenser through noncondensable gases can occur, according to the fundamentally different concept of the invention of the instant application a concentration of noncondensable gases

Applic. No.: 09/655,091
Amdt. Dated August 26, 2006
Reply to Office action of May 26, 2006

can occur and should be taken into consideration in the design.

In order to solve the problem that can only occur with building condenser located inside the containment, the inlet region of the drain pipe according to the invention of the instant application is located in the space region near the building condenser. In this way, a suitable entry area is provided near the building condenser for the possibly collected noncondensable gases, so that the noncondensable gases can be displaced to a harmless area through the drain pipe. Therefore, an unhindered stream of atmosphere gas to be handled can be guaranteed even if noncondensable gases occur near the condenser.

Claims 1 and 2 are, therefore, believed to be patentable over Gluntz et al. and since all of the dependent claims are ultimately dependent on claims 1 or 2, they are believed to be patentable as well.

In view of the foregoing, reconsideration and allowance of claims 1-4 and 7-8 are solicited. Rejoinder of claims 9-10 is requested upon allowance of claims 1-2 because claims 9-10 are dependent on claims 1-2, respectively.

Applic. No.: 09/655,091
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In the event the Examiner should still find any of the claims to be unpatentable, counsel would appreciate a telephone call so that, if possible, patentable language can be worked out.

If an extension of time for this paper is required, petition for extension is herewith made. Please charge any fees which might be due with respect to 37 CFR Sections 1.16 and 1.17 to the Deposit Account of Lerner Greenberg Stemer LLP, No. 12-1099.

Respectfully submitted,

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August 26, 2006

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